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EXAMINER

THOMAS, SHANE M

ART UNIT

PAPER NUMBER

2186

DATE MAILED: 12/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/079,643

Applicant(s)

DIMITRI ET AL.

Examiner

Shane M Thomas

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 002.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Information Disclosure Statement

The information disclosure statement filed 2/20/02 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance JP 2001199505A, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language. It has been placed in the application file, but the information referred to therein has not been considered.

Claim Objections

Claims 15-20 are objected to because of the following minor informalities:

(i) claim 15, line 13, --proving-- should be corrected to --providing--;

Claims 16-20 are dependent upon objected claims. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,2,4, and 6-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Korngiebel et al (U.S. Patent # 5,416,914).

As per claim 1, Korngiebel shows a data storage and retrieval system in figure 1, comprising portable media devices, a robotic arm accessor for accessing the portable media devices, a --first server-- 101, a --first information transfer station-- (combination of the apparatus portable media devices 141 and 142 are attached to), a --first communication link-- (combination of link 161, 163 and 176), a --second server-- 102, a --second information transfer station-- (combination of the apparatus portable media devices 143 and 144 are attached to), and a --second communication link-- (combination of link 161, 163 and 175).

Korngiebel states in column 5, lines 14-18, that any type of information storage volume can be used in the data storage and retrieval system of figure 1. Specifically, column 14, line 30, states that the portable media devices can be solid-state memory. The examiner is considering a hard disk to be a form of a solid-state memory. Figure 1 further shows portable media devices 141 and 142 releasably coupled to the --first information transfer station--. They are releasably coupled since the robotic arm accessor (not shown in figure 1) retrieves the portable media devices from storage cells contained in the library module (111 or 112) and attaches them to the library module so that information contained in the portable media device can be accessed (column 5, lines 7-14).

Servers 101 and 102 each comprise an operating system for accessing the library modules 111 and 112 (column 4, lines 34-40).

As per claim 2, as can be seen in figure 1, the --first information transfer station-- comprises information transfer slots, which have portable media devices 141 and 142 attached.

As per claim 4, as can be seen in figure 1, the --second information transfer station-- comprises information transfer slots, which have portable media devices 143 and 144 attached.

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As per claim 6, --first communication link-- is connected to memory device 110 (automated cartridge library software), which maintains (in a memory) the exact location of the requested portable media device (column 5, line 67 to column 6, line 4).

As per claim 7, --second communication link-- is connected to memory device 109 (automated cartridge library software), which maintains (in memory) the exact location of the requested portable media device (column 5, line 67 to column 6, line 4).

As per claim 8, a user of server 101 can request access to a particular set of data which is stored on one of the portable media devices (column 16, lines 57-60). Therefore it is inherent that server 101 comprises an input device so that the user can input the particular data set request. Further, an operator console is used on server 101 to display request messages (column 5, lines 41-44). The examiner is interpreting this console to be an information display device.

As per claim 9, the examiner is considering the --information connector-- of the accessor of figure 4 to be the extension part of the gripper (robot hand) since the extension part extends the gripper to the particular storage cell the accessor was instructed to place the portable media device. In essence, the extension part --connects-- the gripper to the storage cell, so that --information-- can be retrieved from the portable media device. The examiner is considering the --memory device-- of claim 9 to be the portable memory device that is to be inserted into the particular storage cell. The portable media device is --connected-- to the gripper by the --information connector-- (extension part) of the gripper.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Korngiebel et al (U.S. Patent #5,416,914) in view of Osten (U.S. Patent #5,948,075).

As per claims 3 and 5, Korngiebel does not specifically show in figure 2 the transfer slots [connecting portable media devices 141-144 to library modules 111 and 112] as having a backplane comprising a power connector and an information connector. Although it is obvious that a backplane including an information connector be included in the data storage and retrieval system of Korngiebel so that data could have been read and written to and from the portable media devices (hard disks) when contained in the transfer slots, a power connector is less obvious. In the disclosure, Korngiebel teaches the data storage and retrieval system using a data cartridge since that form factor has widespread use in the industry (column 5, lines 14-18). For a solid-state memory, such as a hard disk, a power connector is required to operate the disk. Osten teaches a backplane for use in DASD system, which comprises a backplane use to couple a DASD to the DASD enclosure. The backplane is comprised of a power connector 34 and an information connector 38 that is used to transmit data to and from the DASD (column 3, lines 39-51). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine data storage and retrieval system of Korngiebel with the

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teaching of Osten in order to have been able to use a hard disk as the portable media device as suggested in column 14, line 30 of Korngiebel. The teaching of the power connector would have allowed data to have been read or written to/from the hard disk via the information connector.

Claims 10-12 and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beglin (U.S. Patent # 5,469,560) in view of Applicant's admitted prior art.

As per claims 10-12, Beglin shows in figure 4 a data storage a retrieval system comprising an automated storage library 1, --first server-- 22 and a --second server--, which is a mainframe computer housing the combination of 24 and 27 (column 6, lines 6-27). The OSR (object storage and retrieval) of the first server stores, retrieves and deletes objects (data) contained in the automated storage library (column 6, lines 19-24). Disk operation requests to format and defragment a volume (contained on a removable drive contained in the automated storage library 1) can be executed as well (column 2, line 60 - column 3, line 12). Since the first server 21 is responsible for data objects' manipulation as discussed, the examiner is interpreting a request for the formatting or defragmenting of removable media to originate from the first server 21 and be received by the second server. Specifically, upon a defragmentation request, the LCS (library control system) of the second server retrieves and mounts the requested removable drive from the automated storage library onto the --second information transfer station-- (any of drives 0-3 in figure 4) and verifies the removable media is correct (refer to column 2, line 60 - column 3, line 9). The LCS of the second server then performs the requested defragmentation or other operations. Column 3, lines 10-12 teaches that the LCS can delete objects. Since formatting a volume results in the deletion of all data objects, the examiner is

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considering the deletion operation [run for all of the data objects contained on a removable drive] that the LCS can perform as --formatting-- a removable drive.

As per claims 22-24, the same rejection as claims 10-12 applies, wherein the OSR 23 of the first server 21 of figure 4 provides an application program interface (column 6, line 20). This interface issues instructions based on requests to manage the data contained in the automated storage library as discussed in the rejection of claims 10-12. The examiner is considering the application interface to be computer-readable code contained on a computer readable medium since both first server and second server are computers (workstation server and mainframe, respectively - column 6, lines 6-44).

Beglin does not teach a data storage and retrieval system using hard disks (drives) since peripheral storage devices (DASDs and optical discs) have a lower cost than main memory (column 1, lines 34-40). However, Beglin does teach that faster memories (main memories such as hard disks), while expensive, are much faster (column 1, lines 22-44). Applicants' admitted prior art teaches on page 1, lines 8-11 that in an automated storage library can use hard disks as the data storage media comprising the library. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the automated storage library of Beglin with the teaching of hard disks of the Applicant in order to have had faster automated storage media which would have increased the speed of information storage and retrieval during access of the automated storage library.

Claims 13,14,25, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rhoades (U.S. Patent Application # U.S. 2002/0087880) in view of Gniewek (U.S. Patent # 5,287,459) in further view of Applicant's admitted prior art.

As per claims 13 and 25, Rhoades discloses a storage and retrieval system in 600 in figure 6. According to ¶0051, information is stored in the library storage modules (LSMs) 620 and 628. When information is to be written, first server 606 sends the data to LSM 620 via bus 614 and control signals to write data via bus 618. The examiner is considering the tape [cartridge] of LSM 620 that the first server 606 is writing the data to be the --designated-- tape. Once the information is written to the designated tape, a request for a copy of the cartridge can come from second server 610 (step 704, figure 7). A --transfer-- tape is releasably coupled to a --first information transfer station-- (a location of LSM 620 where a cartridge for copying is coupled), and the information of the designated cartridge is written to (copied onto) the transfer tape (step 708). After copying, the transfer tape is released from the LSM 620, sent through pass through 630 to LSM 628 (step 714) which is associated with second server 610, and releasably coupled to a --second information transfer station-- (information transfer station of second server) of LSM 628.

Once the transfer disk is received (step 718) and mounted (step 922 of figure 9) in LSM 628, Rhoades does not teach further copying the transfer disk to designated tapes in LSM 628. Gniewek teaches creating multiple copies of data modules (tapes) in a data storage and retrieval system to improve access time of the information stored on data tapes (column 3, lines 15-27). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the data storage and retrieval system of Rhoades with the tape

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duplication teaching of Gniewek in order to have created redundant copies of the transfer tape sent from LSM 620 of Rhoades to have reduced the access time associated with retrieving the data contained on the transfer tape. The examiner is considering the first and second servers 606 and 610 of the data storage and retrieval system of modified Rhoades as being the combination of the host central processing unit and the MVC controller 82 of Gniewek since the servers manage the data storage and retrieval of the LSMs 620 and 628, respectively (§0051 of Rhoades). Therefore, the copying would have been done --on-- the second server since the MVC controller of the second server is responsible for creating the tape copies (see column 9, lines 4-8 of Gniewek). Copies of the transfer tape would have been contained on tapes --designated-- by a managing controller (column 3, lines 59-61 of Gniewek). It should be made of record that the notion of --releasably coupling-- is well known to one having ordinary skill in the art of automated storage libraries, such as the storage and retrieval system of Rhoades and Gniewek.

Regarding claim 25, a computer-readable medium containing code to utilize the storage and retrieval system 600 is claimed by Rhoades (see claims 27-29). Gniewek states in column 5, lines 40-42, that each host processor 10 includes complex electronic circuits and computer programs for computation and data processing system control, which the examiner is considering a computer usable medium containing computer readable program code to perform the functions of Gniewek as discussed above.

Modified Rhoades does not teach using hard disk (drives) in the data storage and retrieval system 600(drives) but does mention that any type of data storage unit can be used to implement the data storage and retrieval system. Applicants' admitted prior art teaches on page 1, lines 8-11 that in an automated storage library can use hard disks as the data storage media comprising the

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library. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the data storage and retrieval system 600 of modified Rhoades with the teaching of hard disks of the Applicant in order to have had faster automated storage media which would have increased the speed of information storage and retrieval during access of the automated storage library.

As per claims 14 and 26, Gniewek states that the host central processing unit has the ability to delete (erase) [information of] the transfer tape (column 8, lines 65-67). As above, the examiner is considering the first and second servers 606 and 610 of the data storage and retrieval system of modified Rhoades as being the combination of the host central processing unit and the MVC controller 82 since the servers manage the data storage and retrieval of the LSMs 620 and 628, respectively (§0051 of Rhoades). It is inherent that the data storage system of modified Rhoades store the transfer disk after it has been erased because LSMs are library storage modules; therefore, when not being accessed, the tapes are stored.

Claims 15-21, and 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rhoades (U.S. Patent Application # U.S. 2002/0087880) in view of Applicant's admitted prior art.

As per claims 15 and 27, Rhoades shows a method to retrieve information from data storage and retrieval system (600 of figure 6) in figures 7-9. The examiner is considering ACSL server 610 and ACSL server 606 to be first and second servers, respectively. A data request from the first server 610 is made to the second server 608 to copy a tape containing requested data (figure 704). Once the tape containing the requested information is retrieved or a data tape

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is created (step 702) of the information requested, the examiner is considering step 702 to take place on a second information transfer station that is connected to the second server. Because the copying of data takes place in the LSM 620, the examiner is further considering the second information transfer station to be located in/on the LSM 620. Once the information requested is copied onto the copy tape (step 708), the copied tape is releasably coupled from the second information transfer station of LSM 620 and passed through gateway 630 (step 714) to an information transfer station contained on LSM 628. The examiner is considering the information transfer station of LSM 628 to be a first information transfer station since LSM 628 corresponds to first server 610. Steps 914-922 depict inserting and mounting the copied information tape into the first information transfer station of LSM 628, culminating in the cataloging of (providing access to) the tape in step 922 so first server 610 can access it.

Modified Rhoades does not teach using hard disk (drives) in the data storage and retrieval system 600(drives) but does mention that any type of data storage unit can be used to implement the data storage and retrieval system. Applicants' admitted prior art teaches on page 1, lines 8-11 that in an automated storage library can use hard disks as the data storage media comprising the library. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the data storage and retrieval system 600 of modified Rhoades with the teaching of hard disks of the Applicant in order to have had faster automated storage media which would have increased the speed of information storage and retrieval during access of the automated storage library.

As per claims 16 and 19, either first or second server 606 or 610 can issue a pass-through command to a targeted LSM (¶0053). Since the pass-through port 630 carries hard disks to and

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from the LSMs, it could have been seen that the servers 606 and 610 would have --selected-- and received a hard disk. Thus, in accordance to the previous example in the rejection for claim 15 above, the first server 610 would have performed the request to have a hard disk delivered with the necessary information contained therein (refer to ¶0049, page 4).

As per claims 17 and 20, the rejection follows the rejection for claim 16. The data storage and retrieval 600 would have *comprised* first server 610; therefore, the examiner is considering the *data storage and retrieval system* to have --selected-- the required hard disk from LSM 620.

As per claim 18 and 28, the examiner is considering the copying of the data to the second server 606 to have occurred when a copy of the selected hard disk would have been made (step 708), since the copying of hard disks would have been controlled by the servers as has been discussed above. When a request to copy a selected hard disk had been issued, the examiner is considering the information of the selected hard disk to have been copied to be a --designated-- hard disk. The --designed-- hard disk is releasably coupled to a second information transfer station, a second information transfer station being associated with the second server and contained in LSM 620. Finally, the copying of the selected tape to the designated tape occurs in step 708.

Further regarding claims 27 and 28, a computer-readable medium containing code to utilize the storage and retrieval system 600 is anticipated by Rhoades (see claims 27-29 of Rhoades).

As per claims 21 and 29, the examiner is considering server 606 and server 610 to be first and second servers, respectively. Further, the examiner is considering the robotic arm of LSMs

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620 and 628, used to access the tapes and put them the information transfer slots of the LSMs, to be accessors (§0007). First and second server can send requests to transfer information between each other (§0049, page 4). When data is to be transfered from the first server to the second server, the accessor places a tape in pass-through port 630. When the accessor is performing this process, the examiner is considering the accessor as comprising magnetic tape containing data (§0006). This magnetic tape is contained in a tape cartridge chassis, which the examiner is considering to be the --information connector-- since the cartridge --connects-- to the information transfer stations to allow data on the tape to be read and written. The tape cartridge is in --communication-- with the magnetic tape so that when the reels of the cartridge are moved, the magnetic tape is moved as well.

Control information to transfer data (step 704, figure 4) is sent from first server 606 via bus 632 and eventually to LSM 620 by control path 618. The control information is used to instruct the robot of the LSM to transport a tape cartridge (information connector) from a first location to a second location (§0049, page 5). The information to be transferred is copied to another magnetic tape (memory device) before being sent to second server (step 708). The examiner is considering the tape cartridge (information connector) to be coupled to the first information transfer station when the copying is being performed. As discussed previously, the first information transfer station is a tape drive (§0007) that is used by the servers to store and retrieve data on the releasably coupled tapes. Step 708 stores the information to be transferred on the magnetic tape (memory device) of the copy tape. Once the tape cartridge passes through gateway 630, the cartridge is realeasbly coupled to a second transfer information station located on LSM 628 (step 922, figure 9). Finally, when information on the copied tape is to be accessed

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by the second server (and sent through network 102 - back to a requesting host 108 for example) the examiner is considering the --copying of data-- to occur onto the hard disk 232 (figure 2) of second server 610 before the information is to be sent out on the system bus (206 figure 2) to a requesting host of network 102.

Further regarding claim 29, a computer-readable medium containing code to utilize the storage and retrieval system 600 in order to transfer information between servers is anticipated by Rhoades (see claims 27-29 of Rhoades).

Modified Rhoades does not teach using hard disk (drives) in the data storage and retrieval system 600(drives) but does mention that any type of data storage unit can be used to implement the data storage and retrieval system. Applicants' admitted prior art teaches on page 1, lines 8-11 that in an automated storage library can use hard disks as the data storage media comprising the library. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the data storage and retrieval system 600 of modified Rhoades with the teaching of hard disks of the Applicant in order to have had faster automated storage media which would have increased the speed of information storage and retrieval during access of the automated storage library. With this modification to Rhoades is made, the examiner is considering the --memory device-- to be the hard disk itself and the --information connector-- in communication with the --memory device-- to be a connector (often a ribbon cable) required to transfer data to and from the hard disk.

Claims 30-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rhoades (U.S. Patent Application # U.S. 2002/0087880) in view of Gniewek (U.S. Patent # 5,287,459).

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As per claims 30 and 33, Rhoades shows a data storage and retrieval system in figure 6 with --first data storage library-- LSM 620 and --second data storage library-- LSM 628. First data storage library (FDSL) is --in communication-- with first server 610 since first server 610 can send a request to FDSL 620 in order to request a copy of an information tape (step 704, figure 7 and ¶0049, page 4). The tape cartridges contained in FDSL 620 are first portable data storage media, and the tape drives in communication with FDSL 620 are first information transfer stations. The second data storage library (SDSL) 628 is in communication with first server 610 by means of data bus 622 and control path 626. The tape cartridges contained in SDSL 628 are second portable data storage media, and the tape drives in communication with SDSL 628 are second information transfer stations.

Figure 7 depicts a flow diagram for the transfer of information from FDSL 620 to SDSL 628 by first receiving a request for information sent from first server 610 (¶0049, step 704). The examiner is considering the designated tape of the FDSL 620 to be copied to be a designated first portable data storage media (tape) and the copy of the tape, which will eventually be mounted in SDSL 628 (step 922, figure 9). The designated information tape to be copied is releasably coupled to a tape drive (first information transfer station) and instructions are sent *by* second server 606 to make a copy of the tape containing the information (step 708). The created tape (designated second portable data storage media) is then sent through pass-through port 630 to SDSL 628 (step 714).

Rhoades does not teach releasably coupling the received tape (designated second portable data storage media) to the second information transfer station (tape drive of SDSL 628) in order to further write information on other designated second portable data storage media contained in

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SDSL 628. The examiner is interpreting lines 17-18 of claim 30 and line 19-20 of claim 33 to signify writing the information of the copied tape on one or more *other* media contained in SDSL 628. In other words, making more copies of the tape onto other designated tapes. Gniewek teaches creating multiple copies of data modules (tapes) in a data storage and retrieval system to improve access time of the information stored on data tapes (column 3, lines 15-27). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the data storage and retrieval system of Rhoades with the tape duplication teaching of Gniewek in order to have created redundant copies of the transfer tape sent from LSM 620 of Rhoades to have thereby reduced the access time associated with retrieving the data contained on the transfer tape.

Further regarding claims 33-35, a computer-readable medium containing code to utilize the storage and retrieval system 600 in order to transfer information between a first storage library and a second storage library servers is claimed by Rhoades (see claims 27-29 of Rhoades). Gniewek states in column 5, lines 40-42, that each host processor 10 includes complex electronic circuits and computer programs for computation and data processing system control, which the examiner is considering a computer usable medium containing computer readable program code to perform the functions of Gniewek as discussed above.

As per claims 31, 32, 34, and 35, Rhoades states in ¶0006 that magnetic tape cartridges are used. Further, Rhoades states in ¶0062 that optical media can be used (CD-ROMs and DVDs) in lieu of magnetic media.

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Conclusion


Prior art made of record and not relied upon and considered pertinent to applicant's disclosure are listed in PTO-892. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shane M Thomas whose telephone number is (703) 605-0725. The examiner can normally be reached on M-F 8:30 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matt M Kim can be reached on (703) 305-3821. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 764-7239 for regular communications and (703) 764-7239 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.



Shane M. Thomas
November 24, 2003



MATTHEW KIM
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100